

jk



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.                  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------|-------------|----------------------|---------------------|------------------|
| 09/652,035                       | 08/31/2000  | Jurgen Babst         | 0307-0145P          | 4551             |
| 30593                            | 7590        | 01/30/2006           | EXAMINER            |                  |
| HARNESS, DICKEY & PIERCE, P.L.C. |             |                      | SPOONER, LAMONT M   |                  |
| P.O. BOX 8910                    |             |                      | ART UNIT            |                  |
| RESTON, VA 20195                 |             |                      | PAPER NUMBER        |                  |

2654

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/652,035             | BABST ET AL.        |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Lamont M. Spooner      | 2654                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-78 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-78 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. The Examiner acknowledges the Supplemental Declaration submitted March 17, 2005.

2. Applicant's arguments filed 11/02/05 have been fully considered but they are not persuasive.

In response to applicant's arguments, p.16, "The Steele '342 patent fails to teach... "determining whether or not the plurality of symbols include a sequence of symbols dependent upon at least one other symbol" as well as "morphing a stored word corresponding to a symbol sequence including the at least one other symbol. " The Examiner cannot concur. As the applicant acknowledges, p.16. "the system does appear to recognize which symbol corresponds to the subject and which symbol corresponds to the verb..." Steele teaches, C.3.lines 48-59-having a symbol sequence, which is on a syntactic axis, and dependencies. In C.4.lines 45-54-"two or more adjacent icons" explicitly and inherently define that the syntactical analysis which depends on a dependent symbol in a symbol sequence, not limited to a total of two symbols (i.e. Fig. 3 item 12 b), furthermore, morphing a stored word corresponding to a symbol sequence including the at least one other symbol, Figs. 12a-c-teaches of the syntactical analysis which depends upon the dependent symbol sequence, Input, Parser, Output:tree-structured parse, to produce at least one modified form of the stored word, c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a

grammatically correct sentence including the word “pours” instead of “pour” as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c, C.3.lines 48-59-his Mary saw father, and Fig. 12 b. his “man drink tea” as it relates to the syntactical analysis and dependent symbol of a sequence” as in the about, “the chef pours...”

In response to applicant’s arguments, pp.18, 19, “there clearly not mention of displaying a plurality of selectable words, and then subsequently displaying morphs of the selected words for further selection. The Examiner cannot concur. In col. 8, lines 20-65, “set selector finds a set...to display. Display gets the set data for display...Member selector stores the word text for inflection and/or output and copies the inflect and endings data to display...When set selector selected a set, display...use to the inputs to obtain the inflections and endings for selected words.”

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-39, and 55-75 are rejected under 35 U.S.C. 102(b) as being anticipated by Steele et al. (Steele, 5,169,342).

As per **claims 1, 14, 27**, Steele discloses a method comprising:

receiving input of a plurality of symbols (Fig. 13g);

determining whether or not the plurality of input symbols include a sequence of symbols dependent upon at least one other symbol (c.3.line 48-59-“syntactic axis”,

Art Unit: 2654

c.4.lines 45-54-"two or more adjacent icons"-meaning the icons are dependent upon another icon in order to determine syntactical information, Figs. 12a-c-teaches of the syntactical analysis which depends upon the dependent symbol sequence); and morphing a stored word corresponding to a symbol sequence including the at least one other symbol (Figs. 12a-c-teaches of the syntactical analysis which depends upon the dependent symbol sequence, Input, Parser, Output:tree-structured parse), to produce at least one modified form of the stored word (c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per **claims 2, 15, 24 and 28**, Steele discloses all of the limitations of claim 1, upon which claim 2 depends. Steele further discloses:

the symbols are input by actuation of corresponding keys on a keyboard (c.3.lines 20-27, Fig. 1-screen keyboard, icons are the symbols inputted).

As per **claims 3 and 29**, Steele discloses all of the limitations of claim 1, upon which claim 3 depends. Steele further discloses:

storing words in a database corresponding to symbol sequences (c.12.lines 40-42).

As per **claims 4, 16 and 30**, Steele discloses all of the limitations of claim 3, upon which claim 4 depends. Steele further discloses:

the database also includes morphing codes (c.3.lines 57-59-his syntactic rules), stored in association with the words and used in morphing the stored words (ibid, c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per **claims 5, 17 and 31**, Steele disclose all of the limitations of claim 4, upon which claim 5 depends. Steele further disclose:

the morphing codes indicate a part of speech of the stored words (Fig. 12a).

As per **claims 6, 18, and 32**, Steele disclose all of the limitations of claim 5, upon which claim 6 depends. Steele further disclose:

the stored word is morphed in a manner dependent upon the part of speech of the stored word (Fig. 12a-c, c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per **claims 7, 19 and 33**, Steele discloses all of the limitations of claim 1, upon which claim 7 depends. Steele further discloses:

the stored word is morphed in a manner dependent upon the part of speech of the stored word (c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a

Art Unit: 2654

grammatically correct sentence including the word “pours” instead of “pour” as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per **claims 8, 20, 21 and 34**, Steele discloses all of the limitations of claim 1, upon which claim 8 depends. Steele further discloses:

the symbols include pictorial (Fig. 13g) illustrations.

As per **claims 9, 22, and 35**, Steele disclose all of the limitations of claim 1, upon which claim 9 depends. Steele further disclose:

accessing a stored word corresponding to a sequence of the plurality of input symbols, in response to determining that the plurality of input symbols did not include a dependent sequence c.3.line 55-c.4.lines 17-his icon image sequence, and paradigmatic stored choices, the paradigmatic choices are determined not to include a dependent symbol sequence, as in they specify what can replace-interpreted as independent, as the syntactical rules specify what may follow-interpreted as dependent)

As per **claims 10, 23 and 36**, Steele discloses all of the limitations of claim 1, upon which claim 10 depends. Steele further discloses:

replacing a dependent symbol sequence with the at least one other symbol, in response to determining that the plurality of input symbols included a dependent sequence (c.4.line 54-c.5.line 8), wherein

a stored word corresponding to a symbol sequence including the substituted at least one symbol is morphed (ibid, c.9.lines 25-40, Fig. 12a-c, c.12.lines 20-25” pour(s), Fig. 13g, “the chef pours” dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence

including the word “pours” instead of “pour” as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c, the Examiner interprets the syntactical rules to apply to the entire Invention disclosed by Steele, to include the replaced symbol sequence, and morphing of a word corresponding to a symbols sequence).

As per **claims 11 and 37**, Steele disclose all of the limitations of claim 10, upon which claim 11 depends. Steele further disclose:

storing words in a database corresponding to symbol sequences (c.12.lines 40-42).

As per **claims 12, 25 and 38**, Steele discloses all of the limitations of claim 11, upon which claim 12 depends. Steele further disclose:

the database also includes morphing codes (c.3.lines 57-59-his syntactic rules), stored in association with the words and used in morphing the stored words (c.12.lines 20-25” pour(s), Fig. 13g, “the chef pours” dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence including the word “pours” instead of “pour” as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per **claims 13, 26 and 39**, Steele disclose all of the limitations of claim 12, upon which claim 13 depends. Steele further disclose:

the morphing codes indicate a part of speech of the stored words (Fig. 12a).

As per **claims 55, 60-62, 67-69, 74 and 75**, Steele and further discloses, wherein the dependent sequence of symbols does not include a word corresponding thereto



Art Unit: 2654

(see dependent claims, i.e. claim 1 for dependent symbol sequence discussion, none of the sequences include the word "Jump");

wherein at least one symbol of the dependent sequence does not have a word corresponding thereto (ibid);

As per **claims 56, 63, and 70**, Steele further discloses at least one symbol in the dependent sequence is polysemous (Fig. 12a, b-"drink").

As per **claim 57, 58, 64, 65, 71, and 72**, Steele further discloses, wherein at least one symbol in the dependent sequence dictates a type (verb tense, see claim 1, pour(s) as present tense, as it relates to "man drink tea") of morphing to be done to a stored word);

As per **claims 59, 66, and 73**, Steele further discloses wherein the dependent sequence of symbols includes at least one symbol only selected to control morphing (see claim 1, inherent to selection of a symbol sequence, wherein, C.3.line 60-C.4.line 17, the verb icon is controlled by syntactic analysis, and controls morphing, as it is placed in accordance with the syntactic rules, in a specified sequential structure.)

5. Claims 40-54, and 76-78 are rejected under 35 U.S.C. 102(b) as being anticipated by Freeman (5,649,223).

As per **claims 40, 45 and 50**, Freeman discloses a word prediction method comprising:

displaying a plurality of selectable words beginning with an input character, in response to receipt of the input character (C.8.lines 20-25-"set selector... single inputs", C.10.lines 1-10);

determining whether or not morphing data is stored in association with a selected word, in response to receiving selection of a displayed word (c.8.lines 35-43-his words are searched for possible inflections);

morphing the selected word in response to determining that morphing data is stored in association with the selected word (c.8.lines 53-55); and

displaying morphs of the selected word for further selection (ibid).

As per **claims 41, 46 and 51**, Freeman discloses all of the limitations of claim 40, upon which claim 41 depends. Freeman further discloses:

storing words, and morphing data in association with at least one of the words, in a database (abstract, c.8.lines 53-55).

As per **claims 42, 47 and 52**, Freeman discloses all of the limitations of claim 41, upon which claim 42 depends. Freeman further discloses:

the morphing data includes morphing codes indicating a part of speech of the stored words (C.13.line 54-c.14.line 37).

As per **claims 43, 48 and 53**, Freeman discloses all of the limitations of claim 42, upon which claim 43 depends. Freeman further discloses:

the selected word is morphed in a manner dependent upon the part of speech of the stored word (c.13.lines 54-c.14.lines 20, especially c.14.lines 13-20).

As per **claims 44, 49 and 54**, Freeman discloses all of the limitations of claim 40, upon which claim 44 depends. Freeman further discloses:

the selected word is morphed in a manner dependent upon the part of speech of the stored word (ibid).

As per **claims 76, 77, and 78**, Freeman discloses morphs are automatically displayed for further selection upon selection of a displayed word (C.8.line 55-C.9.line 22)

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamont M. Spooner whose telephone number is 571/272-7613. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571/272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lms  
1/14/06



RICHEMOND DORVIL  
SUPERVISORY PATENT EXAMINER